

• CRM 37-1449
REV. 7 80

INFORMATION DISCLOSURE CITATION
IN AN APPLICATION

(Use several sheets if necessary)

ATTY. DOCKET NO.
BU94-15A2

SERIAL NO.
09/018,194

APPLICANT
Barbara A. Gilclrest et al.

FILING DATE
February 4, 1998

GROUP

1645-1647

U.S. PATENT DOCUMENTS

EXAM INER INI- TIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
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FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO
SLW	AL2	WO 96/06633	7 MAR 96	PCT		
SLW	AM2	WO 97/37228	9 OCT 97	PCT		



OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

SLW	AS8	R. Paus, et al., "Neural Mechanisms of Hair Growth Control," JID Symposium, 2(1):61-67 (August 1997).
SLW	AT8	M. Yaar, et al., "Human Melanocytes as a Model System for Studies of Alzheimer Disease," Arch Dermatol., 133:1287-1291 (Oct. 1977).

EXAMINER

Sandra Wegert

DATE CONSIDERED

10/24/01

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PTO 1449 PENDING

ATTORNEY DOCKET NO.
0054.1087-005

APPLICATION NO.
09/018,194

THIRD SUPPLEMENTAL INFORMATION DISCLOSURE
CITATION
IN AN APPLICATION

APPLICANT
Barbara A. Gilchrest et al.

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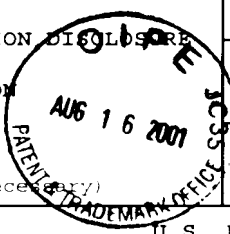
July 30, 2001

FILING DATE
February 4, 1998

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U.S. PATENT DOCUMENTS

EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
SLV	AC	6,242,416 B1	5-JUN-01	Gilchrest et al.	514	2	-

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO
	AL						
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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Samuel Heger

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U.S. PATENT DOCUMENTS

EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
SLW	AA	4,621,023	11/4/86	Redziniak, et al.	428	402.2	—
SLW	AB	5,077,211	12/31/91	Yarosh	435	193	—

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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO
SLW	AL	JP63183518	28-07-88	Japan (Abstract)			
	AM	JP63301810	08-12-88	Japan (Abstract)			
	AN	96/12955	2-May-96	PCT			
	AO	92/18149	29-Oct-92	PCT			
	AP	0 584 452 A1	02-Mar-94	EPO			
	AQ	95/21193	10-Aug-95	PCT			

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SLW	AR	Zhai, S. et al., "A Role for P75 Nerve Growth Factor Receptor in Programmed Melanocyte Cell Death After Injury and With Aging," <i>Journal of Investigative Dermatology</i> 102(4):545, SID Abstract #131 (1994)
	AS	Yaar, M. et al., "Cloning and Expression of a Novel Nerve Growth Factor Related Molecule in Human Skin," <i>Journal of Investigative Dermatology</i> 100(4):548, Abstract #100 (1993)
	AT	Yaar, M. et al., "Melanocyte Function in Human Skin is Modulated by Neurotrophic Factors through TRK Receptors," <i>Journal of Investigative Dermatology</i> 100(4):511, Abstract #134 (1993)

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AV

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AW

Price, Vera H., "Alopecia Areata: Clinical Aspects," *Journal of Investigative Dermatology* 96(5), Supplement:68S (1991)

AX

Yaar, Mina and Gilchrest, Barbara A, "Human Melanocyte Growth and Differentiation: A Decade of New Data," *Journal of Investigative Dermatology* 97(4):611-617 (1991)

AY

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Friedmann, Peter S., "Clinical and Immunologic Associations of Alopecia Areata," *Seminars in Dermatology* 4(1):9-15 (1985)

AR2

Stenn, K.S. et al., "Expression of the bcl-2 Protooncogene in the Cycling Adult Mouse Hair Follicle," *Journal of Investigative Dermatology* 103(1):107-111 (1994)

AS2

Rabizadeh, Shahrooz et al., "Induction of Apoptosis by the Low-Affinity NGF Receptor," *Science* 261:345-348 (1993)

AT2

Garcia, Irene et al., "Prevention of Programmed Cell Death of Sympathetic Neurons by the bcl-2 Proto-Oncogene," *Science* 258:302-304 (1992)

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Allsopp, Timothy E. et al., "The Proto-Oncogene bcl-2 Can Selectively Rescue Neurotrophic Factor-Dependent Neurons from Apoptosis," *Cell* 73:295-307 (1993)

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Andrea Wiegert

10/25/01

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		FILING DATE February 4, 1998	GROUP 1614 1647
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
SLW	AW2	Di Marco, Eddi et al., "Growth-regulated Synthesis and Secretion of Biologically Active Nerve Growth Factor by Human Keratinocytes," <i>Journal of Biological Chemistry</i> 266(32):21718-21722 (1991)	
	AX2	Yaar, Mina et al., "Evidence for Nerve Growth Factor-mediated Paracrine Effects in Human Epidermis," <i>Journal of Cell Biology</i> 115(3):821-828 (1991)	
	AY2	Barinaga, Marcia "Death Gives Birth to the Nervous System. But How?" <i>Science</i> 259:762-763 (1993)	
	AZ2	Hockenbery, David M. et al., "Bcl-2 Functions in an Antioxidant Pathway to Prevent Apoptosis," <i>Cell</i> 75:241-251 (1993)	
	AR3	Di Marco, Eddi et al., "Molecular Cloning of <i>trkE</i> , a Novel <i>trk</i> -related Putative Tyrosine Kinase Receptor Isolated from Normal Human Keratinocytes and Widely Expressed by Normal Human Tissues," <i>Journal of Biological Chemistry</i> 268(32):24290-24295 (1993)	
	AS3	Peacocke, Monica et al., "Induction of nerve growth factor receptors on cultured human melanocytes," <i>Proc. Natl. Acad. Sci. USA</i> 85:5282-5286 (1988)	
	AT3	Barinaga, Marcia, "Cell Suicide: By ICE, Not Fire," <i>Science</i> 263:754-756 (1994)	
	AU3	Paus, R. et al., "Telogen skin contains an inhibitor of hair growth," <i>British Journal of Dermatology</i> 122:777-784 (1990)	
	AV3	Ross, Alonzo H. et al., "Characterization of nerve growth factor receptor in neural crest tumors using monoclonal antibodies," <i>Proc. Natl. Acad. Sci. USA</i> 81:6681-6685 (1984)	
	AW3	Halaban, R. et al., "Basic Fibroblast Growth Factor from Human Keratinocytes Is a Natural Mitogen for Melanocytes," <i>Journal of Cell Biology</i> 107:1611-1619 (1988)	
	AX3	Halaban, Ruth et al., "bFGF is the Putative Natural Growth Factor For Human Melanocytes," <i>In Vitro Cellular & Developmental Biology</i> 23(1):47-52 (1987)	
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526		Ullrich, Axel et al., "Human β -nerve growth factor gene sequence highly homologous to that of mouse," <i>Nature</i> 303:821-825 (1983)			
AZ3		Morgenstern, Jay P. and Land, Hartmut, "Advanced mammalian gene transfer: high titre retroviral vectors with multiple drug selection markers and a complementary helper-free packaging cell line," <i>Nucleic Acids Research</i> 18(12):3587-3596 (1990)			
AR4		Johnson, Dan et al., "Expression and Structure of the Human NGF Receptor," <i>Cell</i> 47:545-554 (1986)			
AS4		Heuer, Josef G. et al., "Structure and Developmental Expression of the Chicken NGF Receptor," <i>Developmental Biology</i> 137:287-304 (1990)			
AT4		Large, Thomas H. et al., "Structure and Developmental Expression of the Nerve Growth Factor Receptor in the Chicken Central Nervous System," <i>Neuron</i> 2:1123-1134 (1989)			
AU4		Radeke, Monte J. et al., "Gene transfer and molecular cloning of the rat nerve growth factor receptor," <i>Nature</i> 325:593-597 (1987)			
AV4		Mitchell, Andrew J. and Krull, Edward A., "Alopecia areata: Pathogenesis and treatment," <i>Journal of the American Academy of Dermatology</i> 11(5)I:763-775 (1984)			
AW4		Klein, Rüdiger et al., "The <i>trk</i> Proto-Oncogene Encodes a Receptor for Nerve Growth Factor," <i>Cell</i> 65:189-197 (1991)			
AX4		Maisonpierre, Peter C. et al., "Neurotrophin-3: A Neurotrophic Factor Related to NGF and BDNF," <i>Science</i> 247:1446-1451 (1990)			
AY4		Chao, Moses V. et al., "Gene Transfer and Molecular Cloning of the Human NGF Receptor," <i>Science</i> 232:518-521 (1986)			
AZ4		Headington, John T., "Transverse Microscopic Anatomy of the Human Scalp," <i>Arch. Dermatol.</i> 120:449-456 (1984)			
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AS5

Gilchrest, Barbara A., "Skin and Aging Processes," (Boca Raton, FL., CRC Press, Inc.) pp. 19-20 (1984)

AT5

Bertolino, Arthur P. et al., "Biology of Hair Follicles," In *Dermatology in General Medicine*, Thomas B. Fitzpatrick et al. (Ed.), Section 4, Chapter 19, (NY: McGraw-Hill, Inc.) pp. 289-293, Fourth Edition, (1993)

AU5

Bertolino, Arthur P. and Freedberg, Irwin M., "Hair," In *Dermatology in General Medicine*, Thomas B. Fitzpatrick et al. (Ed.), Section 10, Chapter 61, (NY: McGraw-Hill, Inc.) pp. 671-673, Fourth Edition, (1993)

AV5

Marchetti, D., et al., "Nerve Growth Factor Effects on Human and Mouse Melanoma Cell Invasion and Heparanase Production," *Int. J. Cancer*, 55:692-699 (1993).

AW5

Spritz, R.A., et al., "Inhibition of Proliferation of Human Melanocytes by a KIT Antisense Oligodeoxynucleotide: Implications for Human Piebaldism and Mouse Dominant White Spotting (W)," *J. Invest. Dermatology*, 103(2):148-150 (1994).

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Nataraj, A., et al., "bcl-2 Oncogene Blocks Differentiation and Extends Viability But Does Not Immortalize Normal Human Keratinocytes," *Intl. J. Oncology*, 4:1211-1218 (1994).

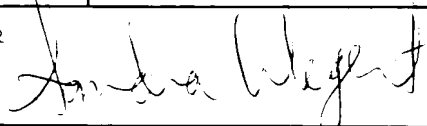
AY5

Nakayama, K., et al., "Targeted Disruption of Bcl2 $\alpha\beta$ in Mice: Occurance of Gray Hair, Polycystic Kidney Disease, and Lymphocytopenia," *Proc. Natl. Acad. Sci. USA*, 91:3700-3704 (1994).

AZ5

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SLW OIPE JC55 OCT 26 1998 PATENT & TRADEMARK OFFICE		Lu, K. and Campisi, J., "Ras Proteins are Essential and Selective for the Action of Insulin-Like Growth Factor 1 Late in the G ¹ Phase of the Cell Cycle in BALB/c Murine Fibroblasts," <i>Proc. Natl. Acad. Sci. USA</i> , 89:3889-3893 (1992).	
	AS6	Yaar, M., et al., "Human Nevocellular Nevus Cells are Surrounded by Basement Membrane Components," <i>Laboratory Invest.</i> , 58(2):157-162 (1988).	
	AT6	Tsujimoto, Y. and Croce, C.M., "Analysis of the Structure, Transcripts, and Protein Products, of <i>bcl-2</i> , The Gene Involved in Human Follicular Lymphoma," <i>Proc. Natl. Acad. Sci. USA</i> , 83:5214-5218 (1986).	
	AU6	International Search Report, International Application No.: PCT/US97/94966, mailed August 28, 1997	
	AV6	Yaar, M., et al., "The <i>trk</i> Family of Receptors Mediates Nerve Growth Factor and Neurotrophin-3 Effects in Melanocytes," <i>J. Clin. Invest.</i> , 94(4):1550-1562 (1994).	
	AW6	Lapchak, P.A., "Nerve Growth Factor Pharmacology: Application to the Treatment of Cholinergic Neurodegeneration in Alzheimer's Disease," <i>Exper. Neurology</i> , 124:16-20 (1993).	
	AX6	Casaccia-Bonofil, P., et al., "Death of Oligodendrocytes Mediated by the Interaction of Nerve Growth Factor With its Receptor p57," <i>Nature</i> , 383:716-719 (1996).	
	AY6	Huber, J.L., et al., "A Potential Interaction of p75 and <i>trkA</i> NGF Receptors Revealed by Affinity Crosslinking and Immunoprecipitation," <i>J. Neuroscience Res.</i> , 40:557-563 (1995).	
	AZ6	Mahadeo, D., et al., "High Affinity Nerve Growth Factor Binding Displays a Faster Rate of Association Than p140 ^{trk} Binding," <i>J. Biol. Chem.</i> , 269(9): 6884-6891 (1994).	
	AR7	Frade, J.M., et al., "Induction of Cell Death by Endogenous Nerve Growth Factor Through its p75 Receptor," <i>Nature</i> , 383:166-168 (1996).	
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Reams, W.H., "Effects of Nerve-Growth Promoting Protein on Murine Integument," <i>J. Invest. Dermatology</i> , 49(6):552-558 (1967).					
AT7	Zhai, S., et al., "The Role of Nerve Growth Factor in Preventing Keratinocyte Apoptosis," Abstract No. 108, <i>J. Invest. Dermat.</i> , 104:572 (1995)				
AU7	Cotman, C.W. and Anderson, A.J., "A Potential Role for Apoptosis in Neurodegeneration and Alzheimer's Disease," <i>Mol. Neurobiol.</i> , 10:19-45 (1995)				
AV7	Su, J.H., et al., "Immunohistochemical evidence for apoptosis in Alzheimer's disease," <i>Neuroreport</i> , 5:2529-2533 (1994)				
AW7	Oltvai, Z.N, et al., "Bcl-2 Heterodimerizes In Vivo with a Conserved Homolog, Bax, That Accelerates Programed Cell Death," <i>Cell</i> , 74:609-619 (1993)				
AX7	Larkfors, L., et al. "Decreased level of nerve growth factor (NGF) and its messenger RNA in the aged rat brain," <i>Brain Res.</i> , 427:55-60; (1987)				
AY7	Botchkarev, V.A., "New Roles for Neurotrophin-3, Neurotrophin-4 and Brain Derived Neurotrophic Factor: Involvement in Hair Growth Control," <i>J Invest Dermatol.</i> , 110(4):48, Abstract #51 (1998)				
AZ7	Botchkarev, V.A., et al. "Neurotrophin-3 Involvement in the Regulation of Hair Follicle Morphogenesis," <i>J Invest. Dermatol.</i> , 111:279-285, (1998)				
AR8	Paus, R., Lüftl, M., Czarnetzki, B.M. " Nerve growth factor modulates keratinocyte proliferation in murine skin organ culture," <i>Brit. J. Dermatol.</i> 130:174-180 (1994)				
EXAMINER <i>Barbara A. Gilchrest</i>		DATE CONSIDERED 10/25/01			